0066639

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

AUG 26 2005

05-ESD-0117

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Mr. Wilson:

REVISED HANFORD FACILITY PART A FORMS FOR TREATMENT, STORAGE, AND DISPOSAL UNITS BEING ASSIGNED TO WASHINGTON CLOSURE HANFORD FOR MANAGEMENT AS CO-OPERATOR

The U.S. Department of Energy, Richland Operations Office (RL) and its contractor, Washington Closure Hanford (WCH), are submitting the enclosed Hanford Facility Resource Conservation and Recovery Act (RCRA) Part A Forms (ECY 030-31 Hanford Rev. 3/5/04), effective January 2005 for the three units being assigned to WCH, as co-operator, for future management. WCH will assume responsibility for management of these units as co-operator effective August 27, 2005. Additionally, the submission of these Part A Forms supersedes the previous Part A Form 1 Permit application that currently designates Bechtel Hanford, Inc. (BHI) as the co-operator.

The three units and their corresponding Part A Forms being transferred from BHI to WCH are:

- 1301-N Liquid Waste Disposal Facility (Revision 8)
- 300 Area Waste Acid Treatment System (WATS) (Revision 7)
- 303-M Oxide Facility (Interim Status Unit) (Revision 3)

Consistent with the provisions of WAC 173-303-805(5)(c) and WAC 173-303-805(7)(a)(iv), RL and WCH are requesting that the Hanford Facility Permit be modified to reflect the deletion of BHI and the addition of WCH as co-operator for the identified three units. Since the Washington State Department of Ecology (Ecology) has been aware of the planned change in RL contractors for several months, and in recent discussions with Ecology regarding the imminent change, RL and WCH request Ecology to waive the WAC 173-303-805(7)(a)(iv) requirement for 90-day notice prior to the change.

In accordance with Hanford Facility RCRA Permit Condition I.E.14.a, Class [1]1, Permit Modifications for 1301-N and the 300 Area WATS have been prepared and will be submitted in the quarterly Class 1 modification notification due to Ecology in September 2005.

If you have questions, please contact me, or your staff may contact Doug S. Shoop, Assistant Manager for Safety and Engineering, on (509) 376-0108.

Sincerely,

Keith A. Klein
Manager

ESD:ACM

Enclosures

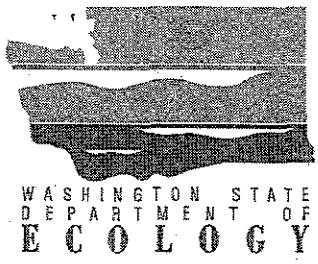
w/encls:
G. P. Davis, Ecology
S. Harris, CTUIR
R. Jim, YN
P. L. Pettiette, H0-33
P. Sobotta, NPT
Administrative Record, HF RCRA Permit
Environmental Portal, LMSI
Ecology NWP Library
HFOR, General File (S. A. Thompson, FH)

DEBBI ISOM H6-08

cc w/o encls:
R. J. Landon, H9-03
J. A. Vanni, Ecology
J. J. Wallace, Ecology

A6-37

NOTIFY SENDER OF NEW/CORRECT MAIL STOP NUMBER (MSIN)



Washington State Department of Ecology
Nuclear Waste Program
Hanford Project

Document Receipt Verification

ADDRESSEE: MICHAEL A. WILSON

RECEIVER SIGNATURE: Manzano

DATE/TIME DELIVERED: Friday, August 26, 2005 11:33 AM

DOCUMENT TITLE:

05-ESD-0117
REVISED HANFORD FACILITY PART A FORMS FOR TREATMENT, STORAGE, AND DISPOSAL UNITS BEING ASSIGNED TO WASHINGTON CLOSURE HANFORD FOR MANATEMENT AS CO-OPERATOR

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Dangerous Waste Permit Application Part A Form

Date Received	Reviewed by:	Date:
Month Day Year	Approved by:	Date:
	Please refer to instructions for completing this form.	

I. This form is submitted to: (place an "X" in the appropriate box)

☒	Request modification to a final status permit (commonly called a "Part B" permit)
☐	Request a change under interim status
☐	Apply for a final status permit. This includes the application for the initial final status permit for a site or for a permit renewal (i.e., a new permit to replace an expiring permit).
☐	Establish interim status because of the wastes newly regulated on: (Date)
	List waste codes:

II. EPA/State ID Number

W	A	7	8	9	0	0	0	8	9	6	7

III. Name of Facility

US Department of Energy – Hanford Facility

IV. Facility Location (Physical address not P.O. Box or Route Number)

A. Street

825 Jadwin

City or Town	State	ZIP Code
Richland	WA	99352

County Code (if known)	County Name
005	Benton

B. Land Type	C. Geographic Location Latitude (degrees, mins, secs)	Longitude (degrees, mins, secs)	D. Facility Existence Date Month Day Year
F	SEE TOPO	MAP	03 22 1943

V. Facility Mailing Address

Street or P.O. Box

P.O. Box 550

City or Town	State	ZIP Code
Richland	WA	99352

VI. Facility contact (Person to be contacted regarding waste activities at facility)		
Name (last)	**(first)**	
Klein	Keith	
Job Title	**Phone Number (area code and number)**	
Manager	(509) 376-7395*	
Contact Address		
Street or P.O. Box		
P.O. Box 550		
City or Town	**State**	**ZIP Code**
Richland	WA	99352

VII. Facility Operator Information		
A. Name	**Phone Number (area code and number)**	
Department of Energy * Owner/Operator Washington Closure Hanford LLC** Co-Operator for 1301-N Liquid Waste Disposal Facility	(509) 376-7395* (509) 372-9951**	
Street or P.O. Box		
P.O. Box 550 * 3070 George Washington Way**		
City or Town	**State**	**ZIP Code**
Richland	WA	99352
B. Operator Type F		
C. Does the name in VII.A reflect a proposed change in operator? ☐ Yes ☒ No **If yes, provide the scheduled date for the change:**	**Month**	**Day** **Year**
D. Is the name listed in VII.A. also the owner? If yes, skip to Section VIII.C. ☐ Yes ☒ No		

VIII. Facility Owner Information	
A. Name	**Phone Number (area code and number)**
Keith A. Klein, Operator/Facility-Property Owner*	(509) 376-7395*
Street or P.O. Box	
P.O. Box 550	
City or Town	**State** **ZIP Code**
Richland	WA 99352
B. Operator Type F	
C. Does the name in VII.A reflect a proposed change in operator? ☐ Yes ☒ No **If yes, provide the scheduled date for the change:**	**Month** **Day** **Year**

IX. NAICS Codes (5/6 digit codes)

A. First							B. Second						
5	6	2	2	1		Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
C. Third							**D. Fourth**						
9	9	9	9	9	9	Unclassified Establishments	5	6	2	9	1	0	Remediation Services

X. Other Environmental Permits (see instructions)

A. Permit Type	B. Permit Number	C. Description
		None

XI. Nature of Business (provide a brief description that includes both dangerous waste and non-dangerous waste areas and activities)

The 1301-N LWDF was used for the disposal of liquid waste from N reactor. The waste consisted of waste from nonspecific sources and listed waste (F003), toxicity characteristic waste (D006, D007, D008, and D009), characteristic waste (D002), and state-only toxic waste (WT02).

D83

The 1301-N Liquid Waste Disposal Facility (LWDF) was used from 1963 to September 1985. The LWDF received mixed waste process and cooling waste water from N Reactor. The LWDF also received dangerous waste generated from laboratories, and may have received waste from spills within the N Reactor Building, which were discharged through the mixed waste drain system. The dangerous waste discharges consisted of less than 0.002% of the total volume of the waste discharged to the LWDF. The 1301-N LWDF was a percolation unit designed for the disposal of liquid waste through the soil column. The process design capacity for the LWDF was 16,352,900 liters (4,320,000 gallons) a day. The process design capacity reflects the maximum volume of water discharged on a daily basis rather than the physical capacity of the unit. The influent pipes up to the face of the 105-N building facility are considered to be included within the treatment, storage, and disposal unit boundary.

EXAMPLE FOR COMPLETING ITEMS XII and XIII (shown in lines numbered X-1, X-2, and X-3 below): A facility has two storage tanks that hold 1200 gallons and 400 gallons respectively. There is also treatment in tanks at 20 gallons/hr. Finally, a one-quarter acre area that is two meters deep will undergo *in situ vitrification.*

Section XII. Process Codes and Design Capacities								Section XIII. Other Process Codes								
Line Number		A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	Line Number		A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	D. Process Description
					1. Amount	2. Unit of Measure (enter code)							1. Amount	2. Unit of Measure (enter code)		
X	1	S	0	2	1,600	G	002	X	1	T	0	4	700	C	001	In situ vitrification
X	2	T	0	3	20	E	001									
X	3	T	0	4	700	C	001									
	1	D	8	3	4,320,000	U	001		1							
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2	1							2	1							
2	2							2	2							
2	3							2	3							
2	4							2	4							
2	5							2	5							

XIV. Description of Dangerous Wastes

Example for completing this section: A facility will receive three non-listed wastes, then store and treat them on-site. Two wastes are corrosive only, with the facility receiving and storing the wastes in containers. There will be about 200 pounds per year of each of these two wastes, which will be neutralized in a tank. The other waste is corrosive and ignitable and will be neutralized then blended into hazardous waste fuel. There will be about 100 pounds per year of that waste, which will be received in bulk and put into tanks.

Line Number	A. Dangerous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes	
				(1) Process Codes (enter)	(2) Process Description [If a code is not entered in D (1)]
X 1	D 0 0 2	400	P	S 0 1 T 0 1	
X 2	D 0 0 1	100	P	S 0 2 T 0 1	
X 3	D 0 0 2				Included with above
1	F 0 0 3	6,200	P	D 8 3	Includes Debris
2	D 0 0 2	20,600	P	D 8 3	Includes Debris
3	D 0 0 6	100	P	D 8 3	Includes Debris
4	D 0 0 7	10,000	P	D 8 3	Includes Debris
5	D 0 0 8	150	P	D 8 3	Includes Debris
6	D 0 0 9	6,200	P	D 8 3	Includes Debris
7	W T 0 2	15,000	P	D 8 3	Includes Debris
8					
9					
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11					
12					
13					
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25					

XV. Map

Attach to this application a topographic map of the area extending to at least one (1) mile beyond property boundaries. The map must show the outline of the facility; the location of each of its existing and proposed intake and discharge structures; each of its dangerous waste treatment, storage, recycling, or disposal units; and each well where fluids are injected underground. Include all springs, rivers, and other surface water bodies in this map area, plus drinking water wells listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundary. The instructions provide additional information on meeting these requirements.

XVI. Facility Drawing

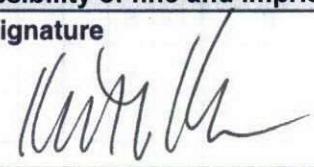
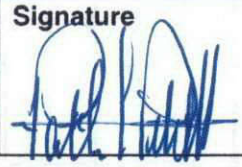
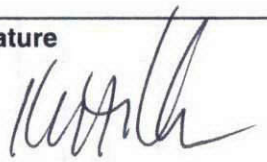
All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, recycling, and disposal areas; and sites of future storage, treatment, recycling, or disposal areas (refer to Instructions for more detail).

XVIII. Certifications

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator* Name and Official Title (type or print) Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	**Signature** 	**Date Signed** 8/25/05
Co-Operator** Name and Official Title (type or print) Patrick L. Pettiette Project Manager Washington Closure Hanford LLC	**Signature** 	**Date Signed** 8-7-05
Co-Operator** – Address and Telephone Number 3070 George Washington Way Richland, WA 99352 (509) 372-9951		
Facility-Property Owner* Name and Official Title (type or print) Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	**Signature** 	**Date Signed** 8/25/05

Comments

On December 27, 2000, Ecology granted a contained-in determination for F003 (methanol) contaminated soil and debris for the 1301-N Liquid Waste Disposal Facility.

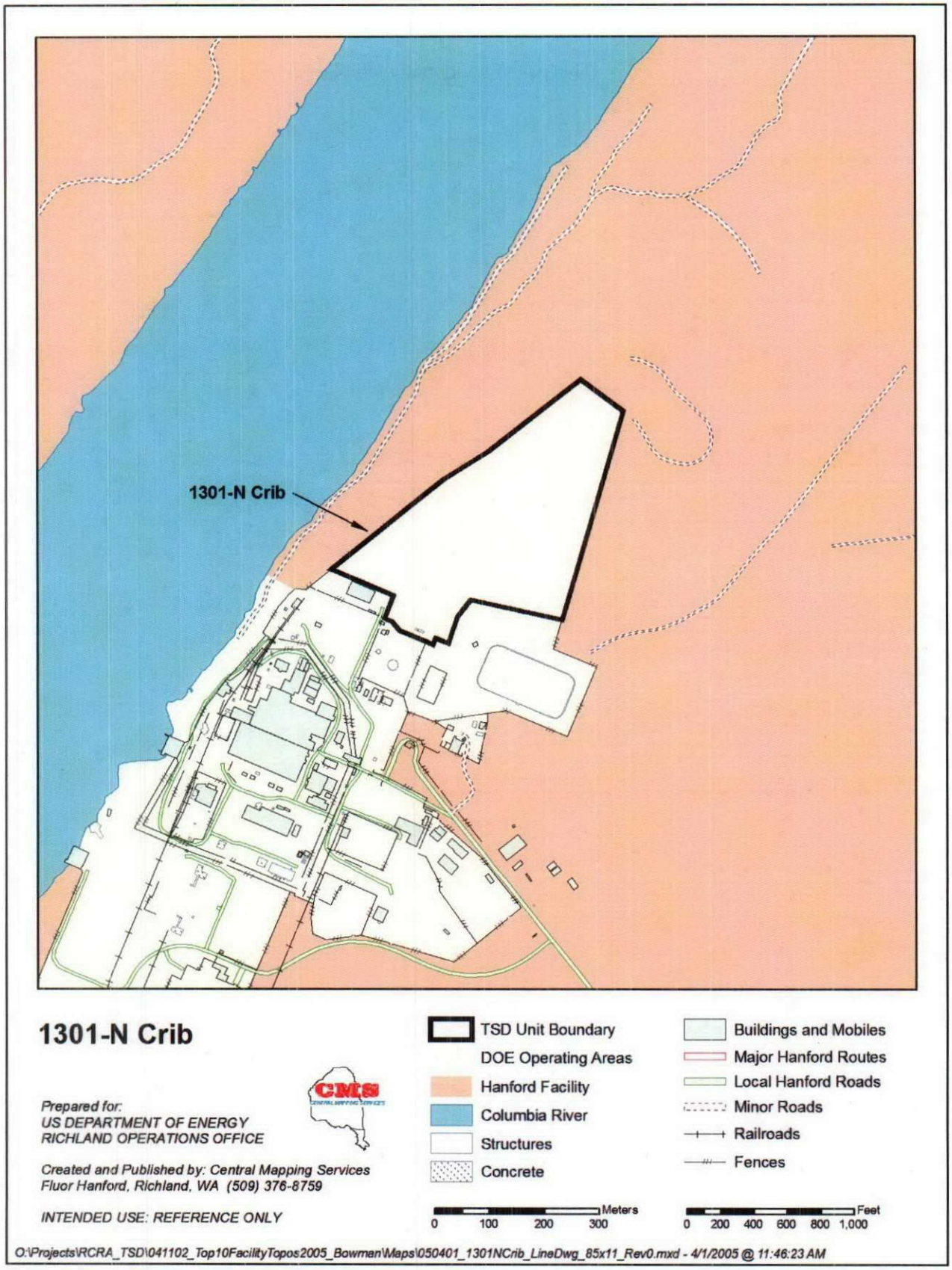
1301-N Liquid Waste Disposal Facility

CRIB OUTFALL

8605087-8CN
(PHOTO TAKEN 1986)

TRENCH CONCRETE COVER

8605087-15CN
(PHOTO TAKEN 1986)


1301-N Crib
1301-N Crib
Prepared for:
US DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
Created and Published by: Central Mapping Services
Fluor Hanford, Richland, WA (509) 376-8759
INTENDED USE: REFERENCE ONLY
TSD Unit Boundary
DOE Operating Areas
Hanford Facility
Columbia River
Structures
Concrete
Buildings and Mobiles
Major Hanford Routes
Local Hanford Roads
Minor Roads
Railroads
Fences
Meters
0 100 200 300
Feet
0 200 400 600 800 1,000
O:\Projects\RCRA_TSD\041102_Top10FacilityTopos2005_Bowman\Maps\050401_1301NCrib_LineDwg_85x11_Rev0.mxd - 4/1/2005 @ 11:46:23 AM

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WASHINGTON STATE DEPARTMENT OF ECOLOGY

Dangerous Waste Permit Application Part A Form

Date Received	Reviewed by:	Date:
Month Day Year	Approved by:	Date:
	Please refer to instructions for completing this form.	

I. This form is submitted to: (place an "X" in the appropriate box)

☒	Request modification to a final status permit (commonly called a "Part B" permit)
☐	Request a change under interim status
☐	Apply for a final status permit. This includes the application for the initial final status permit for a site or for a permit renewal (i.e., a new permit to replace an expiring permit).
☐	Establish interim status because of the wastes newly regulated on: (Date)
	List waste codes:

II. EPA/State ID Number

WA7890008967

III. Name of Facility

US Department of Energy – Hanford Facility

IV. Facility Location (Physical address not P.O. Box or Route Number)

A. Street

825 Jadwin

City or Town	State	ZIP Code
Richland	WA	99352

County Code (if known)	County Name
005	Benton

B. Land Type	C. Geographic Location Latitude (degrees, mins, secs)	Longitude (degrees, mins, secs)	D. Facility Existence Date Month Day Year
F	SEE TOPO MAP		03 02 1943

V. Facility Mailing Address

Street or P.O. Box

P.O. Box 550

City or Town	State	ZIP Code
Richland	WA	99352

VI. Facility contact (Person to be contacted regarding waste activities at facility)		
Name (last)	**(first)**	
Klein	Keith	
Job Title	**Phone Number (area code and number)**	
Manager	(509) 376-7395	
Contact Address		
Street or P.O. Box		
P.O. Box 550		
City or Town	**State**	**ZIP Code**
Richland	WA	99352

VII. Facility Operator Information		
A. Name	**Phone Number (area code and number)**	
Department of Energy * Owner/Operator Washington Closure Hanford** Co-Operator for 300 Area Waste Acid Treatment System	(509) 376-7375* (509) 372-9951**	
Street or P.O. Box		
P.O. Box 550* 3070 George Washington Way**		
City or Town	**State**	**ZIP Code**
Richland	WA	99352
B. Operator Type F		
C. Does the name in VII.A reflect a proposed change in operator? ☐ Yes ☒ No		
If yes, provide the scheduled date for the change: Month / Day / Year		
D. Is the name listed in VII.A. also the owner? If yes, skip to Section VIII.C. ☐ Yes ☒ No		

VIII. Facility Owner Information		
A. Name	**Phone Number (area code and number)**	
Keith A. Klein, Operator/Facility-Property Owner*	(509) 376-7395*	
Street or P.O. Box		
P.O. Box 550		
City or Town	**State**	**ZIP Code**
Richland	WA	99352
B. Operator Type F		
C. Does the name in VII.A reflect a proposed change in operator? ☐ Yes ☒ No		
If yes, provide the scheduled date for the change: Month / Day / Year		

IX. NAICS Codes (5/6 digit codes)

A. First							B. Second						
5	6	2	2	1		Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
C. Third							**D. Fourth**						
9	9	9	9	9	9	Unclassified Establishments	5	6	2	9	1	0	Remediation Services

X. Other Environmental Permits (see instructions)

A. Permit Type	B. Permit Number	C. Description
		None

XI. Nature of Business (provide a brief description that includes both dangerous waste and non-dangerous waste areas and activities)

The 300 Area Waste Acid Treatment System (300 Area WATS) operated from 1973 and ceased operations in 1995. The 300 Area WATS consisted of various buildings and pipe trenches. Information provided on this form pertaining to unit processes, design capacities, or dangerous waste managed at the unit is for historical purposes only.

The 300 WATS was used to treat both mixed and dangerous waste from fuels fabrication operations occuring in the 333 Building and from nonroutine waste additions. Treatment was performed to make the waste more amenable for further treatment and for storage. The 333 Building waste primarily consisted of hydrofluoric acid, nitric acid, sulfuric acid, and copper nitrate. Approximately 2,086,525 kilograms (4,600,000 pounds) of waste were treated and stored yearly in this system. Approximately 907 kilograms (2,000 pounds) of waste (D007, chromium VI to chromium III) were treated per year.

The 311 tank system was used for the treatment and storage of waste. This waste was effluent from the waste acid treatment and uranium recovery process. Approximately 2,086,525 kilograms (4,600,000 pounds) of waste were treated and stored per year in the 311 tanks.

'Partial' closure activities for this unit began in 1996 and were completed September 1999. Closure activities occurred in three phases and in accordance with the approved closure plan and the requirements of the Hanford Facility RCRA Permit, WA7890008967), Revision 7,. Clean closure was achieved for RCRA components for all 300 Area WATS locations and components with the exception of two locations of potential soil contamination. The areas of potential soil contamination are shown as Area 1 and 2 in the Figure. Area 1 is located beneath the concrete WATS and U-Bearing Piping trench. Area 2 is located beneath the scabbled concrete floor of the old 313 Building.

In December 2001, Ecology (Letter, G. P. Davis, Ecology, to J. B. Hebdon, U.S. Department of Energy) accepted certification for the clean closed 300 Area WATS locations and released these clean closed locations from the requirements of RCRA and WAC 173-303. The soil at Areas 1 and 2 will remain unclosed and regulated by RCRA, Chapter 173-303 WAC until soil disposition in conjunction with the future 300-FF-2 Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) Operable Unit remedial action. Concrete surfaces over unclosed soil will remain until the time of soil disposition. Closure of these areas will complete 300 Area WATS closure.

Continued in *Comments* section.

EXAMPLE FOR COMPLETING ITEMS XII and XIII (shown in lines numbered X-1, X-2, and X-3 below): A facility has two storage tanks that hold 1200 gallons and 400 gallons respectively. There is also treatment in tanks at 20 gallons/hr. Finally, a one-quarter acre area that is two meters deep will undergo *in situ vitrification.*

Section XII. Process Codes and Design Capacities								Section XIII. Other Process Codes							
Line Number		A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	Line Number		A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	D. Process Description
					1. Amount	2. Unit of Measure (enter code)							1. Amount	2. Unit of Measure (enter code)		
X	1	S	0	2	1,600	G	002	X	1	T	0	4	700	C	001	In situ vitrification
X	2	T	0	3	20	E	001									
X	3	T	0	4	700	C	001									
	1								1							
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2	4							2	4							
2	5							2	5							

XIV. Description of Dangerous Wastes

Example for completing this section: A facility will receive three non-listed wastes, then store and treat them on-site. Two wastes are corrosive only, with the facility receiving and storing the wastes in containers. There will be about 200 pounds per year of each of these two wastes, which will be neutralized in a tank. The other waste is corrosive and ignitable and will be neutralized then blended into hazardous waste fuel. There will be about 100 pounds per year of that waste, which will be received in bulk and put into tanks.

Line Number	A. Dangerous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes (1) Process Codes (enter)	D. Processes (2) Process Description [If a code is not entered in D (1)]
X 1	D 0 0 2	400	P	S 0 1 T 0 1	
X 2	D 0 0 1	100	P	S 0 2 T 0 1	
X 3	D 0 0 2				Included with above
300 Area Waste Acid Treatment System					
1	D 0 0 1	2,086,525	K	T 0 1 S 0 2 T 0 4	Includes Debris
2	D 0 0 2		K	T 0 1 S 0 2 T 0 4	Includes Debris
3	D 0 0 4		K	T 0 1 S 0 2 T 0 4	Includes Debris
4	D 0 0 5		K	T 0 1 S 0 2 T 0 4	Includes Debris
5	D 0 0 6		K	T 0 1 S 0 2 T 0 4	Includes Debris
6	D 0 0 7		K	T 0 1 S 0 2 T 0 4	Includes Debris
7	D 0 0 8		K	T 0 1 S 0 2 T 0 4	Includes Debris
8	W T 0 2		K	T 0 1 S 0 2 T 0 4	Includes Debris
9	D 0 0 9		K	T 0 1 S 0 2 T 0 4	Includes Debris
10	D 0 0 7	907	K	T 0 1	Includes Debris
311 Tanks					
11	W T 0 2	2,086,525	K	T 0 1 S 0 2	Includes Debris
12	D 0 0 2		K	T 0 1 S 0 2	Includes Debris
13	D 0 0 4		K	T 0 1 S 0 2	Includes Debris
14	D 0 0 5		K	T 0 1 S 0 2	Includes Debris
15	D 0 0 6		K	T 0 1 S 0 2	Includes Debris
16	D 0 0 7		K	T 0 1 S 0 2	Includes Debris
17	D 0 0 8		K	T 0 1 S 0 2	Includes Debris
18	D 0 0 9		K	T 0 1 S 0 2	Includes Debris
19					
20					
21					
22					
23					
24					
25					

XV. Map

Attach to this application a topographic map of the area extending to at least one (1) mile beyond property boundaries. The map must show the outline of the facility; the location of each of its existing and proposed intake and discharge structures; each of its dangerous waste treatment, storage, recycling, or disposal units; and each well where fluids are injected underground. Include all springs, rivers, and other surface water bodies in this map area, plus drinking water wells listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundary. The instructions provide additional information on meeting these requirements.

XVI. Facility Drawing

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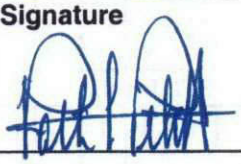
XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, recycling, and disposal areas; and sites of future storage, treatment, recycling, or disposal areas (refer to Instructions for more detail).

XVIII. Certifications

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator* Name and Official Title (type or print) Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	**Signature** 	**Date Signed** 8/25/05
Co-Operator** Name and Official Title (type or print) Patrick L. Pettiette Project Manager Washington Closure Hanford LLC	**Signature** 	**Date Signed** 8-1-05
Co-Operator** – Address and Telephone Number 3070 George Washington Way Richland, WA 99352 (509) 372-9951		
Facility-Property Owner* Name and Official Title (type or print) Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	**Signature** 	**Date Signed** 8/25/05

Comments

T01, S02, T04

The 300 Area Waste Acid Treatment System (300 WATS) and Tank 40 and 50 began waste management operations in April 1973; auxiliary equipment and centrifuge operations began in November 1995. The 300 WATS was used for the treatment and storage of mixed waste generated during fuel fabrication operations in the 300 Area. The 300 WATS also was used for disposing of used and/or unneeded chemicals for other Hanford Facility operations. A portion of the waste initially was treated in two tanks (tanks 7 and 11) in the 333 Building to reduce the chromium (VI) to chromium (III). From May 1983 to January 1987, tanks 7 and 11 were used twice a year to treat up to 757 liters (200 gallons) per day of waste (T01). This waste, along with all other waste acid generated in the 333 Building, was drained to the 334-A Building and stored in two storage tanks (tanks Band C) (S02), with a combined volume of 15,142 liters (4,000 gallons). Previously, waste entered the 334-A Building passing through a settling tank [tank A, volume 1,363 liters (360 gallons)] before entering tanks B and C. Tank A ceased receiving waste in August 1984, when piping was disconnected to the tank and waste was routed directly to tanks B and C. Tank A was cleaned out and the polyvinyl chloride liner removed in 1988.

From startup in April 1973 until August 1973, the waste acid from the 333 Building was collected in a plastic-lined steel underground 14,385 liter (3,800 gallon) tank and a plastic-lined steel aboveground 22,712 liter (6,000 gallon) tank (tank 4) in the 334 Tank Farm. At that time, the underground tank developed a leak and was removed from service. The 334-A Building storage tanks replaced this underground tank in December 1974. Tank 4 was retained for emergency storage when the 313 Building neutralization activities were down for maintenance or modifications. Tank 4 usually was empty and when the tank was filled in January 1986, a leak developed near the top of the tank. Tank 4 was emptied and abandoned at that time. Tank 4 was removed, cleaned, and disposed of onsite in 1988.

The waste acid was pumped from the 334-A Building to the 313 Building where the waste acid underwent pH adjustment in a waste acid neutralization tank (tank 2) (T01). Tank 2 was capable of treating a maximum of 13,249 liters (3,500 gallons) per day of waste acid. The waste acid was pumped from tank 2 to tank 11 and then to a centrifuge where the waste acid underwent further treatment to separate the liquid and solid phases (T04). A maximum of 11,356 liters (3,000 gallons) of waste acid per day could be treated in the centrifuge. The solid waste from the centrifuge was collected in containers and transferred to the 303-K Storage Unit. The liquid effluent was pumped from the centrifuge to tank 5 and to a filter press for additional treatment to remove fine solids (T04), which remained following treatment in the centrifuge. The filter press treated a maximum of 4,542 liters (1,200 gallons) per day. Solids collected in the filter press were sent to the uranium recovery system or to the 303-K Storage Unit. The filtered liquid effluent was drained into effluent collection tanks (tanks 9 and 10), where the liquid effluent was stored temporarily before being pumped to the 311 Tank Farm.

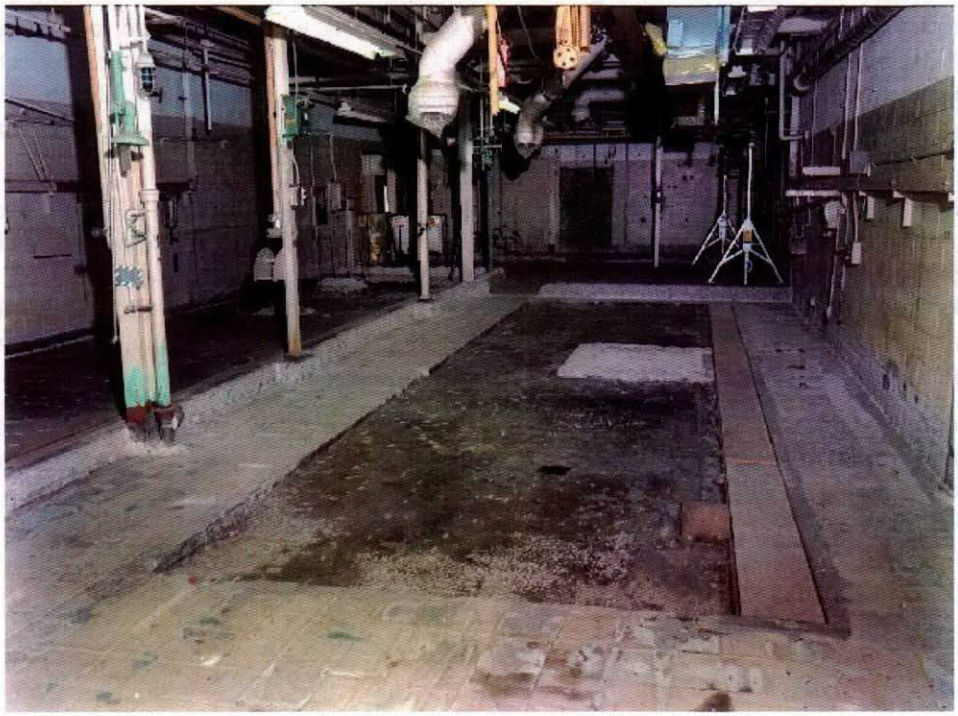
T01, S02 - The 311 Tank Farm was used for storage of treated liquid effluents from both the 300 Area WATS and the uranium recovery process. Storage occurred in two tanks (tanks 40 and 50) with capacities of 15,142 and 18,927 liters (4,000 and 5,000 gallons), respectively. Tanks 40 and 50 are constructed of stainless steel. Tank 50, the 18,927 liter (5,000 gallon) tank, occasionally was used for decanting waste when the centrifuge in the 313 Building was down for maintenance. Tank 50 was capable of treating up to 18,927 liters (5,000 gallons) per day, but only was used occasionally for decanting waste (a total of five times between January 1986 and December 1987).

Auxiliary equipment (two pumps, two cartridge filters, and two sample ports) are housed in the adjacent 303-F Building. Auxiliary equipment was used to filter solutions and to recirculate the solutions between various tanks and the 313 Building for reprocessing.

300 Area Waste Acid Treatment System

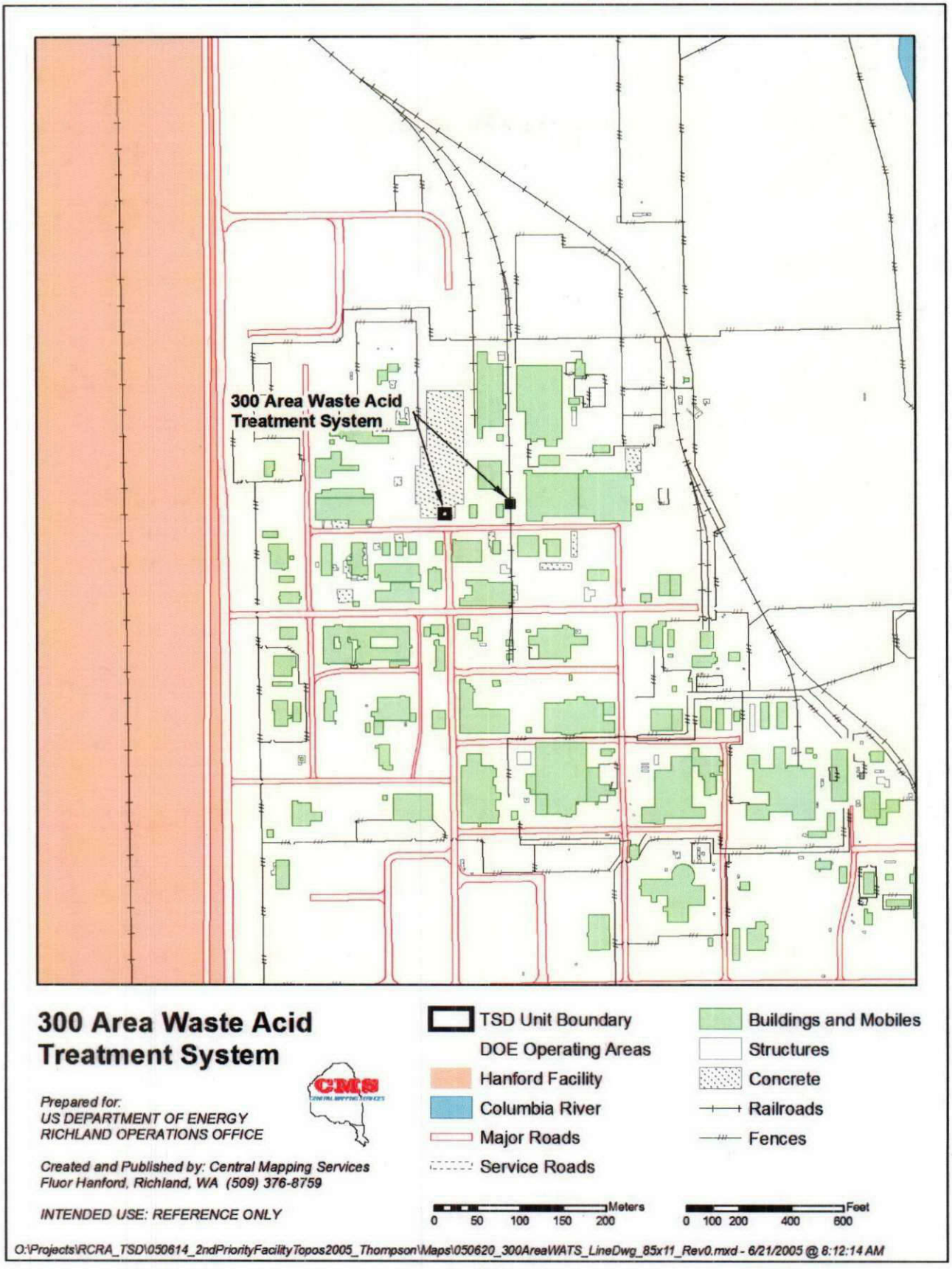
Substructure Soil Contamination Location, Area 1

00070107-6CN
(PHOTO TAKEN 2000)



Substructure Soil Contamination Location, Area 2

00070107-2CN
(PHOTO TAKEN 2000)


300 Area Waste Acid Treatment System
300 Area Waste Acid Treatment System
Prepared for:
US DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
Created and Published by: Central Mapping Services
Fluor Hanford, Richland, WA (509) 376-8759
INTENDED USE: REFERENCE ONLY
TSD Unit Boundary
DOE Operating Areas
Hanford Facility
Columbia River
Major Roads
Service Roads
Buildings and Mobiles
Structures
Concrete
Railroads
Fences
Meters
0 50 100 150 200
Feet
0 100 200 400 600
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WASHINGTON STATE DEPARTMENT OF ECOLOGY

Dangerous Waste Permit Application Part A Form

Date Received	Reviewed by:	Date:
Month Day Year	Approved by:	Date:

Please refer to instructions for completing this form.

I. This form is submitted to: (place an "X" in the appropriate box)

☒	Request modification to a final status permit (commonly called a "Part B" permit)
☐	Request a change under interim status
☐	Apply for a final status permit. This includes the application for the initial final status permit for a site or for a permit renewal (i.e., a new permit to replace an expiring permit).
☐	Establish interim status because of the wastes newly regulated on: (Date)
	List waste codes:

II. EPA/State ID Number

W A 7 8 9 0 0 0 8 9 6 7

III. Name of Facility

US Department of Energy – Hanford Facility

IV. Facility Location (Physical address not P.O. Box or Route Number)

A. Street

825 Jadwin

City or Town	State	ZIP Code
Richland	WA	99352

County Code (if known)	County Name
0 0 5	Benton

B. Land Type	C. Geographic Location Latitude (degrees, mins, secs)	Longitude (degrees, mins, secs)	D. Facility Existence Date Month Day Year
F	S E E T O P O	M A P	0 3 0 2 1 9 4 3

V. Facility Mailing Address

Street or P.O. Box

P.O. Box 550

City or Town	State	ZIP Code
Richland	WA	99352

VI. Facility contact (Person to be contacted regarding waste activities at facility)	
Name (last)	**(first)**
Klein	Keith
Job Title	**Phone Number (area code and number)**
Manager	(509) 376-7395
Contact Address	
Street or P.O. Box	
P.O. Box 550	
City or Town	**State** / **ZIP Code**
Richland	WA / 99352

VII. Facility Operator Information		
A. Name	**Phone Number (area code and number)**	
Department of Energy * Owner/Operator Washington Closure Hanford LLC** Co-Operator for	(509) 376-7375 * (509) 372-9951**	
Street or P.O. Box		
P.O. Box 550 * 3070 George Washington Way**		
City or Town	**State**	**ZIP Code**
Richland	WA	99352
B. Operator Type F		
C. Does the name in VII.A reflect a proposed change in operator? ☐ Yes ☒ No **If yes, provide the scheduled date for the change:**	**Month** / **Day** / **Year**	
D. Is the name listed in VII.A. also the owner? If yes, skip to Section VIII.C. ☐ Yes ☒ No		

VIII. Facility Owner Information		
A. Name	**Phone Number (area code and number)**	
Keith A. Klein, Operator/Facility-Property Owner*	(509) 376-7395*	
Street or P.O. Box		
P.O. Box 550		
City or Town	**State**	**ZIP Code**
Richland	WA	99352
B. Operator Type F		
C. Does the name in VII.A reflect a proposed change in operator? ☐ Yes ☒ No **If yes, provide the scheduled date for the change:**	**Month** / **Day** / **Year**	

IX. NAICS Codes (5/6 digit codes)

A. First							B. Second						
5	6	2	2	1		Waste Treatment & Disposal	9	2	4	1	1	0	Administration of Air & Water Resource & Solid Waste Management Programs
C. Third							**D. Fourth**						
9	9	9	9	9	9	Unclassified Establishments	5	6	2	9	1	0	Remediation Services

X. Other Environmental Permits (see instructions)

A. Permit Type	B. Permit Number	C. Description
		None

XI. Nature of Business (provide a brief description that includes both dangerous waste and non-dangerous waste areas and activities)

T03

The 303-M Oxide Facility began waste management operations in May of 1983 and is located in the 300 Area. The 303-M was used to treat mixed waste generated during fuel fabrication operations. During treatment, saw fines and lathe turnings known as chips, consisting of uranium and zirconium, were treated by incineration to eliminate their pyrophoric nature and to allow for transportation without the possibility of spontaneous combustion. The chips and fines were received in water-filled, 114-liter (30 gallon) containers that were drained, weighed, and prepared for the treatment process. Before treatment, the chips were reduced in size by a chip chopper. The chips and fines were incinerated in 2.3-kilogram (5 pound) batches. A maximum of 0.09 metric ton (0.10 ton) of waste per hour could be treated by incineration. The oxidized material was shipped to Westinghouse Material Company of Ohio where the material was used for the production of fissionable uranium.

The mixed waste treated at the 303-M Oxide Facility was designated as an ignitable waste (D001) due to its zirconium content, which was a pyrophoric material. The 303-M Oxide Facility could have treated 30,844 kilograms (68,000 pounds) of mixed waste per year.

EXAMPLE FOR COMPLETING ITEMS XII and XIII (shown in lines numbered X-1, X-2, and X-3 below): A facility has two storage tanks that hold 1200 gallons and 400 gallons respectively. There is also treatment in tanks at 20 gallons/hr. Finally, a one-quarter acre area that is two meters deep will undergo *in situ vitrification.*

Section XII. Process Codes and Design Capacities								Section XIII. Other Process Codes							
Line Number		A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	Line Number		A. Process Codes (enter code)			B. Process Design Capacity		C. Process Total Number of Units	D. Process Description
					1. Amount	2. Unit of Measure (enter code)							1. Amount	2. Unit of Measure (enter code)		
X	1	S	0	2	1,600	G	002	X	1	T	0	4	700	C	001	In situ vitrification
X	2	T	0	3	20	E	001									
X	3	T	0	4	700	C	001									
	1	T	0	3	.09	W			1							
	2								2							
	3								3							
	4								4							
	5								5							
	6								6							
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1	0							1	0							
1	1							1	1							
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1	3							1	3							
1	4							1	4							
1	5							1	5							
1	6							1	6							
1	7							1	7							
1	8							1	8							
1	9							1	9							
2	0							2	0							
2	1							2	1							
2	2							2	2							
2	3							2	3							
2	4							2	4							
2	5							2	5							

XIV. Description of Dangerous Wastes

Example for completing this section: A facility will receive three non-listed wastes, then store and treat them on-site. Two wastes are corrosive only, with the facility receiving and storing the wastes in containers. There will be about 200 pounds per year of each of these two wastes, which will be neutralized in a tank. The other waste is corrosive and ignitable and will be neutralized then blended into hazardous waste fuel. There will be about 100 pounds per year of that waste, which will be received in bulk and put into tanks.

Line Number	A. Dangerous Waste No. (enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (enter code)	D. Processes	
				(1) Process Codes (enter)	(2) Process Description [If a code is not entered in D (1)]
X 1	D 0 0 2	400	P	S 0 1 T 0 1	
X 2	D 0 0 1	100	P	S 0 2 T 0 1	
X 3	D 0 0 2				Included with above
1	D 0 0 1	30,844	K	T 0 3	Incineration
2					
3					
4					
5					
6					
7					
8					
9					
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11					
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25					

XV. Map

Attach to this application a topographic map of the area extending to at least one (1) mile beyond property boundaries. The map must show the outline of the facility; the location of each of its existing and proposed intake and discharge structures; each of its dangerous waste treatment, storage, recycling, or disposal units; and each well where fluids are injected underground. Include all springs, rivers, and other surface water bodies in this map area, plus drinking water wells listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundary. The instructions provide additional information on meeting these requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (refer to Instructions for more detail).

XVII. Photographs

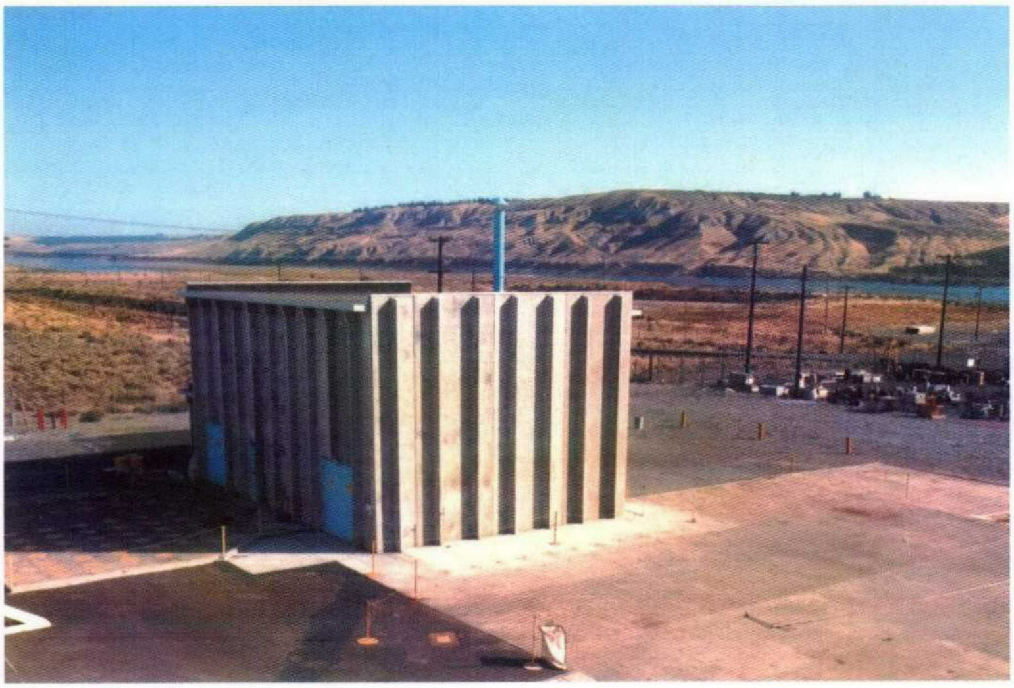
All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, recycling, and disposal areas; and sites of future storage, treatment, recycling, or disposal areas (refer to Instructions for more detail).

XVIII. Certifications

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator* Name and Official Title (type or print) Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	**Signature**	**Date Signed** 8/25/05
Co-Operator** Name and Official Title (type or print) Patrick L. Pettiette Project Manager Washington Closure Hanford LLC	**Signature**	**Date Signed** 8-7-05
Co-Operator** – Address and Telephone Number 3070 George Washington Way Richland, WA 99352 (509) 372-9951		
Facility-Property Owner* Name and Official Title (type or print) Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office	**Signature**	**Date Signed** 8/25/05

Comments

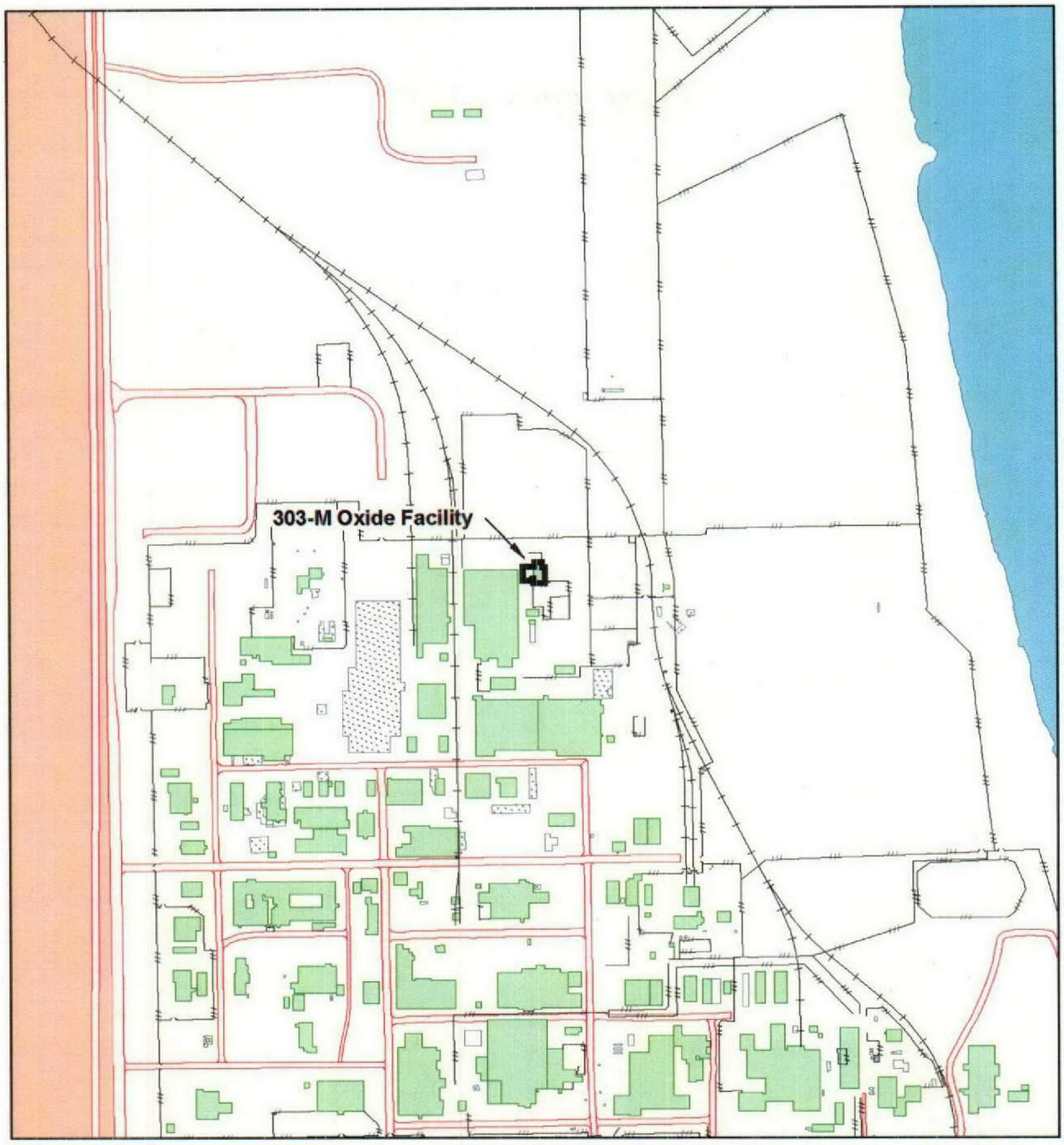


INCINERATOR

8304810-36CN
(PHOTO TAKEN 1983

303-M OXIDE BUILDING

8306387-3CN
(PHOTO TAKEN 1983)



303-M Oxide Facility

Prepared for:
US DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE

Created and Published by: Central Mapping Services
Fluor Hanford, Richland, WA (509) 376-8759

INTENDED USE: REFERENCE ONLY

TSD Unit Boundary
DOE Operating Areas
Hanford Facility
Columbia River
Major Roads
Service Roads
Buildings and Mobiles
Structures
Concrete
Railroads
Fences

Meters: 0 50 100 150 200
Feet: 0 100 200 400 600

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